

## S&MA Mission Services Technical Directive

<b>Control No:</b> 0143	<b>Org. Code:</b> QD20	<b>Project Code:</b> PRA	<b>Contract #:</b> NAS8-00179
<b>Originator:</b> QD20/Toan Vu		<b>Date:</b>	
<b>Office Manager's Signature:</b> QD20/Dan Dumbacher		<b>Date:</b>	
<b>COTR's Signature:</b> QD01/Terry Hamm <i>Terry A. Hamm</i>		<b>Date:</b> 4-21-05	
<b>CO's Signature:</b> PS33/Lee Whalen <i>Lee Whalen</i>		<b>Date:</b> 4/21/05	

**Subject:** Additional Probabilistic Risk Assessment (PRA) support for MSFC Shuttle Elements

**Task Description:**

Conduct technical interchange meeting with each Shuttle Prime (Rocketdyne, Pratt & Whitney, Thiokol, Lockheed Martin, USA) to insure consistency in modeling and quantification

- Resolve technical issues between MSFC elements and JSC, KSC, and HQ
- Provide expert support to the primes through modeling guidance and review of completed models
- Assist primes in model development and quantification
- Review models developed by the prime contractors and resolve any issues that are found
- Input completed PRA models into the SAPHIRE software program
- Assist SPO (Shuttle PRA Program Lead) in documentation, model development, qualification and integration
- Assist SPO in setting up modeling efforts for iteration 3

(b)(4)

Pursuant to article H.7 of the contract entitled "Special Studies," subject to the following conditions:

This direction is consistent with the general scope of work set forth in this contract, does not constitute new assignments of work or change to the expressed terms, conditions or specifications incorporated into the contract, and does not constitute a basis for any increase in the contract fee or extension to the contract fee or extension to the contract delivery schedule.

In the event of any exception, proceed with work under this directive, but promptly notify the contracting officer in writing within ten (10) days. Failure to notify the contracting officer will

constitute acceptance by the contractor of the technical directive and all the conditions pertaining to its issuance.

This technical directive does not increase or obligate any additional funds for performance of the contract scope of work, therefore, nothing contained herein authorizes your incurrence of costs in excess of that presently authorized by the clause of this contract entitled "Limitation of Government's Obligation," or "Limitations of Cost," as applicable.

**Deliverables:**

- Trip reports from technical interchange meetings
- Documentation of communication with Shuttle PRA Team
- Documentation of review comments sent to Shuttle Primes

Duration: ~~TASK ENDS September 30, 2005~~ Six(6) weeks JTW 4/27/05

**Report Progress To:**  
S&MA Lead

**Frequency of Report:**  
As required

**Special Study  
Task Directive 143  
Contract NAS8-00179**

During the first four weeks of the Special Study Task Directive the following task will be performed:

- 1) Conduct technical interchange meeting with each Shuttle Prime (Rocketdyne, Pratt & Whitney, Thiokol, Lockheed Martin, USA) to insure consistency in modeling and quantification.
- 2) Assist SPO (Shuttle PRA Program Lead) in documentation, model development, qualification and integration.
- 3) Assist SPO in setting up modeling efforts for iteration 3.

**Deliverables:**

- Trip reports from technical interchange meetings
- Documentation of communication with Shuttle PRA Team
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